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class V

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Hello dear students
I am your science Teacher
Prabha Semadhyu I think everyone
knows me - I am sending you
questions answers of chapter 1.
Please write down in your
cw copy.

Chapter 1

Plant Reproduction

I New words

Cotyledon : Thick seed leaf that stores food.

Seedling : A baby plant with a small root and a small shoot.

Insecticides : Chemical that kill insects.

Harvesting : Cutting the ripe crop.

Irrigation : Providing water to plants

II Definition

- 1. Dicotyledonous or dicot :- Seeds of some plants have two seed leaves. Such seeds are called dicot or dicotyledonous seeds. Examples :- gram, pea, bean etc.

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2. Monocotyledonous or monocot seeds:- Seeds of some plants have only one seed leaf such seeds are called monocot or monocotyledonous seeds. Examples :- maize, oat, barley etc.
3. Germination of seed :- Growing of a seed into a new plant is called germination.
4. Dispersal of seeds :- The scattering of seeds away from the parent plant is called dispersal of seeds.
5. Vegetative propagation :- New plants grown from other parts of a plant like roots, stem and leaves of the plant. This is called vegetative propagation.
6. Rabi crops :- Crops like wheat and barley are grown in winter season i.e. from November to April.
7. Kharif crops :- Crops like rice, maize, jowar, bajra, jute and cotton are

grown in summer season i.e from June to October.

III Answer the following questions

Q1 What are seed leaves?

Ans. Seed leaves are cotyledons, are the embryonic leaves formed by a seedling. It may remain in the ground when the seed germinates.

Q2 What is germination of a seed?

Ans. The growing of a seed into a new plant is called germination.

Q3 How do animals help in the dispersal of seeds?

Ans. Animals can disperse seeds by excreting or burying them. Other fruits have structures such as hooks that attach themselves to animals fur.

Q4 What are the special features of the seeds dispersed by wind?

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Ans The special features of the seed dispersed by wind are

- light and hairy seeds of cotton, madar, dandelion and hiptage are carried far away by wind.
- The seeds of sycamore tree are winged and spin through the air like mini-helicopters.

Q5 What is the difference between Rabi and Kharif crops?

Rabi crops

1 Rabi crops are known as winter crops.

Kharif crops

Kharif cropping season starts with the onset of monsoon and ends when the rainy season is over.

Rabi Crops

- Crops which are grown in winter season i.e from November to April
- These crops require frequent irrigation because these are grown in dry areas.
- Examples:- wheat, barley, gram, pea.

Kharif Crops

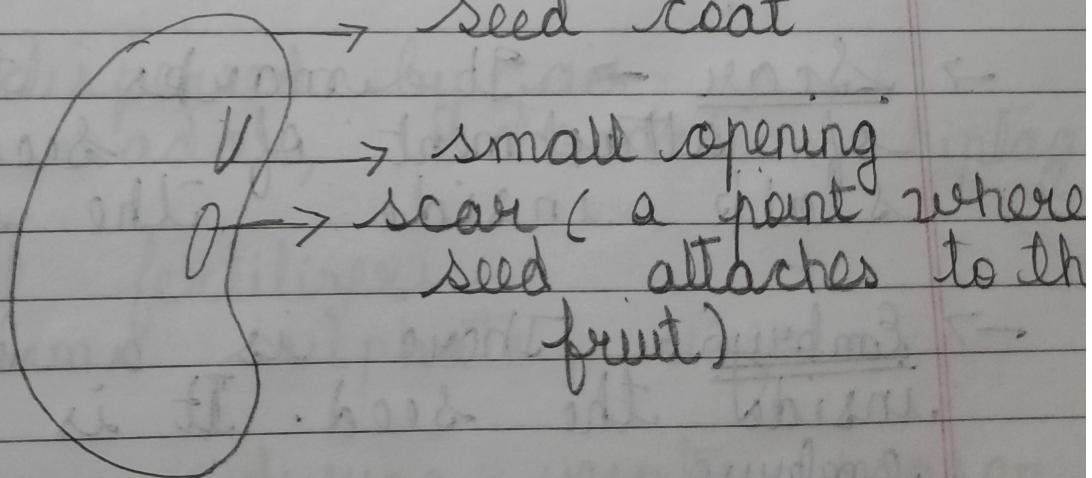
Crops which are grown in summer season i.e from June to October

These crops require good rainfall

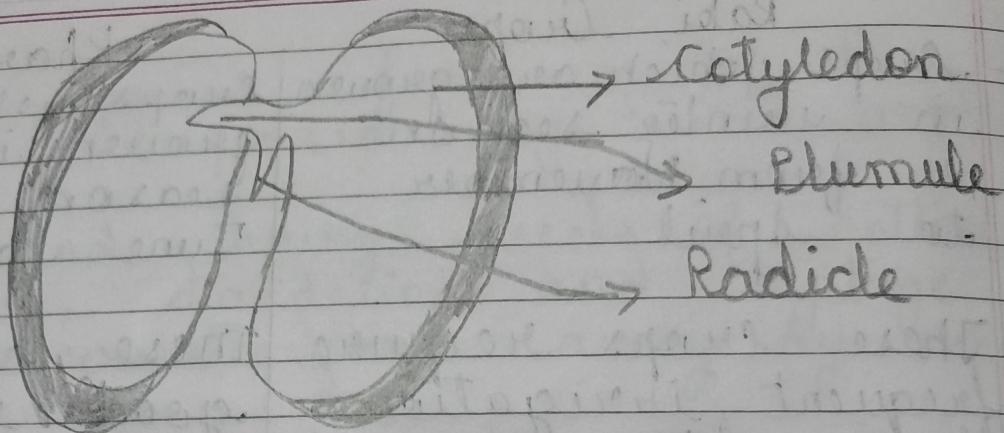
Examples :- rice, maize, jowar, bajra, jute, cotton

Q6. Describe a parts of a seed with the help of well labelled diagram

Ams



A bean seed



A bean seed split open

Ans A seed has many parts

- Seed coat → The outer protective covering of the seed is called seed coat. It has a small opening of the size of pinhole at one end through which water enters the seed.
- Scar → It marks the point of attachment of seed with a stalk inside the fruit.
- Embryo - There is a baby plant inside the seed. It is called embryo.

- Plumule → The embryo has a tiny shoot called plumule.
- Radicle → The embryo has a tiny root called radicle.
- Cotyledons → The embryo is surrounded by seed leaves called cotyledons. The baby plant gets food from cotyledons until it grows green leaves.

IV Give two examples each of the following

- 1 Seed dispersed by water.
Ans lotus, coconut
- 2 Seed dispersed by air.
Ans cotton, madar, dandelion, hiptage
- 3 Chemical fertilizers.
Ans Ammonium sulphate, urea.
- 4 Crop grown during winter season.
Ans wheat, barley.

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new copy.

chapter 2

Animals and their varying lifestyles

I New words

Inhale :- Breathe in air

Exhale :- Breathe out air.

Predator :- Animal which kills and eats other animals.

Prey :- Animals which is killed and eaten by other animals.

Camouflage :- Ability to blend with the surrounding

II Definitions

Habitat :- The place where an animal lives, food is called its habitat.

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2 Adaptations :- Animals develop some features and skill to be able to get food, breathe and to protect themselves from heat, cold and predators. These special features and skills are called adaptations.

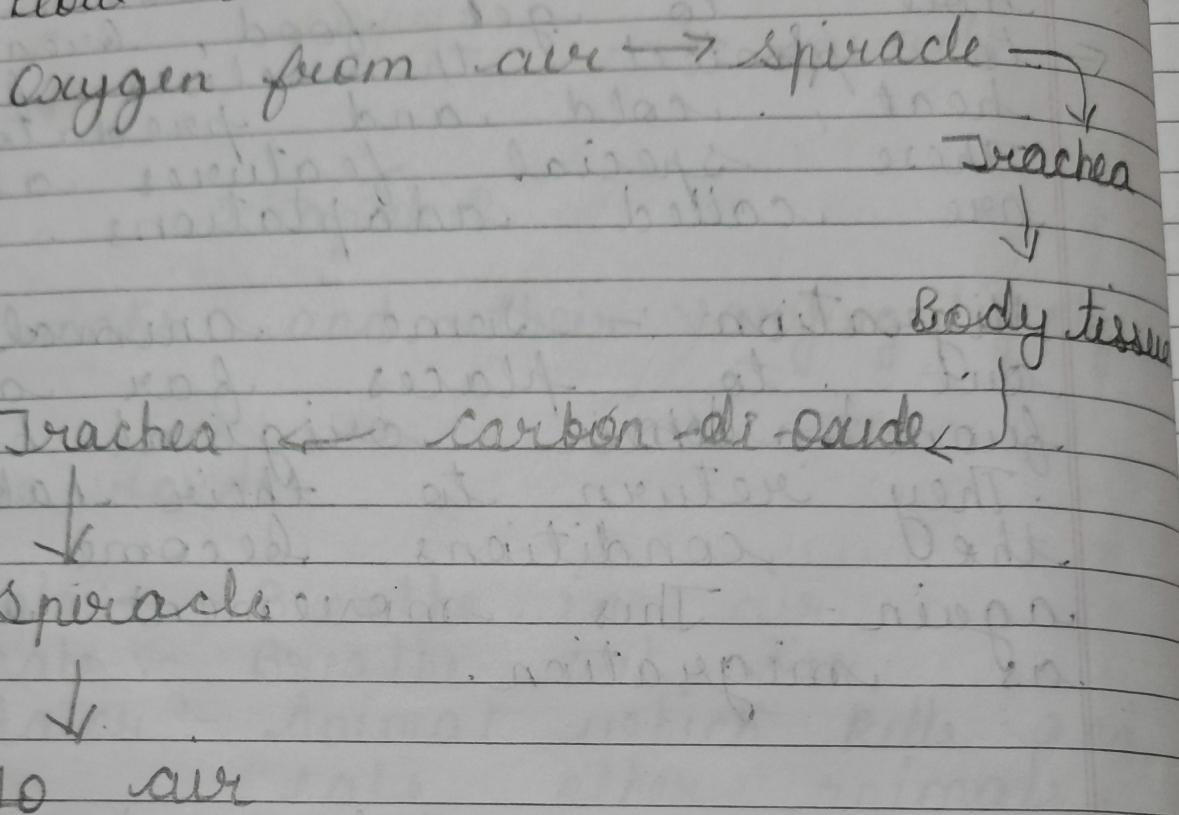
3 Migration :- Some animals move out to places far away from their original habitats. They return to their habitat when the conditions become favourable again. This movement is known as migration.

III Answer the following questions:

Q1 How do insects breathe?
Ans Insects like grasshoppers, bees and cockroaches breathe through trachea. They have small air holes called spiracles on the side of their abdomen. Each spiracle leads to trachea that reaches every part of body, delivering oxygen to the tissue

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Flow chart



Q2 How do fins of fish help it in swimming?

Ans. Fishes have both paired and unpaired fins for swimming.

The true pairs of paired fins help them move forwards. The unpaired fins help in maintaining the balance and the tail is used for

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changing direction while swimming.

Q3. What are the feeding adaptation in herbivores?

Ans: Herbivores such as sheep, cows, rabbits, deer, etc., have large incisors to cut the grass and leaves. They have broad molars to grind and chew the food and long alimentary canals to break down the plant material eaten by them.

Q4. How do frogs catch their prey?

Ans: Frogs feed on flies, beetles and small worms. Frog use their sticky tongues to catch their prey. The tongue of a frog is folded ~~on~~ on the floor of its mouth. The frog flips its tongue at its target very quickly. The prey get stuck to it and then it is pulled into the mouth.

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The teeth in the upper jaw of the frog prevent the prey from escaping.

Q. 05 what do you understand by camouflage?
Ans. Animals like the chameleon have the ability to change their body colour according to their surrounding so that they become unnoticeable to their enemies. This particular skill or behaviour is called camouflage.

Q. 06 How do octopus and cuttlefish protect themselves from their enemies?

Ans. Animals like cuttlefish and octopus release a cloud of black ink-like structure when attacked. This creates confusion for the predator and they find to escape.

Q7 Why do birds migrate?

Ans. Birds migrate to move from areas of low or decreasing resources to area of high or increasing resources. The two primary resources being sought are food and nesting locations. As winter approaches and the availability of insects and other food drop, the birds move south again.

Q8 Why a cockroach will die if we put in water?

Ans. A cockroach will die when put in water because they cannot swim and also they do not have mechanism to breathe the dissolved oxygen in water. So a cockroach will die as they will be unable to breathe.

Q9. Why does a fish die when taken out of water?

Ans. Gills are richly supplied with blood & capillaries and can readily absorb the

oxygen dissolved in water. When fishes are taken out of water, the supply of oxygen to the fishes is cut as the fishes cannot absorb and breathe using the oxygen present in the atmosphere. Hence, they die after some time.

IV Give examples of the following

- i Migratory Birds :- white storks, spotted sandpipers, Rosy pastors, Brown-headed gulls -
- 2 Migratory fishes :- Eel, salmon etc
- 3 Camouflage animals :- grasshopper, chameleon - etc
- 4 Herbivores → Sheeps, cows etc
- 5 Rodents → rats, mice etc

Chapter 5

Food and Health

I New words

Glucose :- A simple carbohydrate which is a source of instant energy.

Fibre :- Fibre present in food.

Balanced diet :- A diet that contains all the nutrients in the right amount.

Nutrient :- A substance present in food that keeps our body healthy.

II Define the following

1 Nutrients :- A substance present in food that keeps our body healthy.

2 Balanced diet :- A diet containing all the nutrients in right amounts as per the requirement of the body is called a balanced diet.

III Answer the following questions

Q1 what are different nutrient present in our food?

Ans The nutrients which are present in our food are:

- 1 Carbohydrate
- 2 Protein
- 3 Fats
- 4 Vitamins
- 5 Minerals

Q2 what is the role of carbohydrates in our body?

Ans Carbohydrate are energy-giving food. They provide instant energy to the body.

Q3 what is the importance of fats?

Ans Fats are also energy-giving food. Fat help us to absorb vitamin A, D, E and K and called fat soluble vitamins. Fat insulates our body to keep us warm.

Q4. Why are protein called body-building foods?

Ans. Proteins help the body to grow, build new cells and tissues and repair the damaged tissue. Therefore these are called body-building foods.

Q5. How are vitamins classified? Give examples.

Ans. Vitamins are classified into two types

1. Fat-soluble vitamins:- Vitamins A, D, E and K dissolve in fats and are called fat-soluble vitamins. Examples - papaya, milk, almonds etc.

2. Water-soluble vitamins:- Vitamin B and C are soluble in water and are called water-soluble vitamins. Examples - Rice, milk, eggs, lemon, amla, orange etc.

Q6. What is roughage? Give examples of roughage-rich foods.

Ans. Roughage is the fibre present

in the plant food that cannot be digested by our digestive system.

Rich sources of roughage are vegetable like pumpkin, spinach, lady's finger and cabbage, fruits, oats and whole grain foods containing seed coats of cereals and pulses.

Q7. Why water play an important role in our body?

Ans. Water play an important role in our body because water provides a medium to dissolve food components for the digestion. It helps to maintain a constant body temperature and to transport substances within the body.

IV Give two examples each of the following

I Energy - giving nutrients - wheat, potatoes.

2 Protective nutrients - Fruits and vegetables.

3 Eat soluble vitamins :- Papaya and milk

4 Water-soluble vitamins :- Rice and amla.

chapter 6

Health and Diseases

Key terms

Microorganism:- Tiny organisms that are seen under a microscope.

Microscope:- An instrument that shows enlarged view of a thing.

Hyper-vitaminosis:- A condition arising due to excess of vitamin in the body.

Define the following

Good health:- It is a state of well-being of body and mind and being free from diseases.

Disease:- It is the condition that does not allow the body to function properly.

Germs:- A large number of diseases are caused by microorganisms and these disease-causing microorganisms are called germs.

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Communicable or infectious diseases:- The diseases which spread from one person to another are called communicable or infectious diseases.

Non-communicable or non-infectious diseases:- The diseases which do not spread from one person to other are called non-communicable diseases.

Nutritional deficiency diseases:- The diseases which are caused due to deficiency of a particular nutrient are called nutritional deficiency diseases.

Immunity:- It is the ability of the body to recognise and destroy germs.

Vaccination:- The process of giving vaccine to a person is called vaccination.

III Answer the following questions.

Q1 How do communicable diseases spread?

Ans:- Communicable diseases spread through

- Through direct contact :- Diseases spread through direct contact contact with a sick person. Diseases like chickenpox, measles, mumps, ringworm.

- Through air :- when a person suffering from a disease coughs, sneezes or spits, the disease causing germs come out into the air and spread all around. Disease like common cold, flu, tuberculosis.

- Through contaminated food and water :- If food is not washed properly or handled with unclean hands And unclean water is carrier of germs of many diseases like typhoid, diarrhoea, jaundice etc.

Through animal bites :- Some animal bites can transfer

germs to the victim and cause the disease - Eg Rabies through a dog bite

Through insect - Some insect also carry the germs and transfer to healthy person. Diseases like malaria, dengue etc

Q2 What are deficiency diseases?
Ans. Diseases caused due to deficiency of a particular nutrient are called nutritional deficiency diseases.

Nutrient

Vitamin A

Deficiency diseases

Night blindness.

Vitamin B

Beri Beri

Vitamin C

Scurvy.

Vitamin D

Rickets

Vitamin K

Haemorrhage.

Iron

Anaemia

Iodine

Cretin

Q3 What is vaccination? How is it helpful?

Ans. Vaccines contain dead or inactive germs in liquid form. The process of giving vaccine to a person is called vaccination.

Vaccination helps the body to develop immunity against a disease.

Q4 What is obesity? What are its causes?

Ans. Excess or overeating of a particular nutrient may cause a disease. Carbohydrate and fats result in obesity.

Common causes of obesity are:

- Eating a poor diet of foods high in fats and calories.
- Not sleeping enough, which can lead to hormonal changes that make you feel hungrier.

Q5 List some wrong food habits?

Ans. Some wrong food habits are:

- Some people take too much

of common salt in their diet. This may lead to high blood pressure or even obesity.

- Excessive intake of fat-soluble vitamins (A, D, E and K), in the form of pills can lead to hypervitaminosis. It affects liver and kidneys.
- Excessive consumption of fried and fatty foods leads to obesity.

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Chapter - 7

staying safe

I Key terms

Pillion rider - The passenger seated behind the driver on a two wheeler.

Antiseptic - Chemical applied to wounds to kill germs.

Sterilise : To make something free from germs.

Pedestrain : A person walking on the road.

II Define the following

Accident - An accident is a sudden, unexpected and harmful incident.

First aid - The immediate help given to an injured person before the arrival of a doctor.

Sprain - It is a condition where the tissue around a joint gets torn due to a sudden jerk.

Fracture :- It is a common injury to the bone in which there occurs a crack or break in a bone.

Poison - A toxic substance that harms our body.

III

Give one word for the following.

- 1 The first help given to the victim before the doctor arrives - First aid
- 2 Condition when the tissue around a joint gets torn due to a sudden jerk - Sprain
- 3 A toxic substance which is harmful to the body - poison
- 4 Support used to prevent movement of a fractured bone - Splint
- 5 Water eruptions on the skin formed as a result of burns - Blisters

IV

Answer the following questions

Q1 What is an accident? How can accidents be prevented?

Ans: An accident is a sudden, unexpected and harmful incident. It causes pain, injury and may even lead to death.

Most accident take place due to carelessness. Accidents can be prevented if we follow some simple safety rules and be careful and alert.

Q2. How will you put out fire caused by petrol?

Ans. Fire caused by petrol or kerosene should be put out by throwing sand instead of water. Petrol and kerosene being lighter than water float on water and continue to burn.

Q3. What first aid should be given in case of sprain and animal bite?

Ans. First aid for sprain

- Apply an ice pack to the sprained area. This will reduce the swelling.
- Apply any pain relieving ointment.
- Tie a crepe bandage or any other clean cloth on the

affected area. This provides support to the surrounding tissues, during movement.

- Give complete rest to the affected part.
- Visit a doctor immediately.

First aid for animal bite.

- Wash the wound with soap and lots of water, as the saliva of animals contains deadly germs.
- Apply an antiseptic and tie a bandage to prevent infection.
- Take the victim to the doctor.

In case of insects like honeybees or wasps bite -

- Scrape the sting with the edge of a clean object and wash with soap. The chemical released by most insects bites is partially neutralised by soap.
- Apply an antiseptic cream after the wash.

Q4. How should poisonous substances be kept at home?

A4. Following precautions should be taken while handling poisonous substances:

- All such substances should be stored ~~and~~ with labels on their containers.
- The poisonous substance should be stored out of the reach of children.
- All medicines should be stored locked in a cupboard.
- The labels of packets and bottles must be read before using them.

Q5. What first aid should be given in case of snake bite?

A5. First aid for snake bite:-

- It is important to stop the spread of poison to the entire body. For this, tie a tight bandage (tourniquet) a little above the bitten area. This would

- ensure that the poison does not spread out in the body.
- If the victim feels drowsy, allow him to sleep.
 - do not take the victim to the doctor immediately.

Q.1 Give reasons.

Ans. Sand should be used in case of fire due to petrol. Can you say why?

Sand should be used in case of fire due to petrol because petrol is floating on water so using water causes the petrol to float on water and burning at the same time while washed away by water unpredictable directions, effectively escalating the fire.

Sand keeps the petrol in place and stops it when its flowing

Q.2 Why should mobile phones not be used while driving?

Ans. Mobile phones should not be used while driving because

it is dangerous due to its potential for causing distracted driving and crashes.

Q3 We find a "No smoking" board at petrol pumps why? Ans. A person is strictly advised to not to smoke at a petrol pump. The atmosphere at a petrol pump is highly inflammable. A person who is smoking is probably carrying a lighter using which can cause a fire at a fuel station.

Chapter 8

Wonders of Air

I Key terms

Atmosphere :- Layer of air around the earth.

Pollution :- Contamination

Pollutants :- Harmful substances

CNG :- Compressed Natural Gas.

Global warming :- Overall increase in the earth's atmospheric temperature.

II Define these terms

1 Wind :- Moving air is called wind.

2 Atmosphere :- The thick layer of air around the earth.

3 Pollution :- The presence of unwanted and harmful materials in the air is called air pollution.

4 Pollutants :- The unwanted substances are called pollutants.

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II Answer the following questions

Q1. What is the composition of air?

Ans. Air is a mixture of many gases. It contains 78 percent Nitrogen, 21 percent oxygen, 0.03 percent carbon dioxide, some water vapour and other gases.

Q2. What are the uses of air pressure?

Ans. The uses of air pressure are

- Air pressure is used to fill a pitchkari and a doctor's syringe.

- Air pressure is also used to fill ink in a fountain pen.

- Moving liquids from one container to other using a siphon.

Q3 what do you understand by air pollution ? what are its main causes ?

Ans. The presence of unwanted and harmful materials in the air is called air pollution.

Main causes of air pollution:

- Burning of fossil fuel releases carbon dioxide and other harmful gases into the air.
- Industries release smoke containing many harmful gases.
- Rotting garbage and open drains release gases having foul smell.
- Automobiles release harmful substances like oxides of nitrogen and sulphur.
- Aeroplanes and space crafts release lots of smoke in the air.

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Q4 State 5 main effects of air pollution. + how can air pollution be reduced?

Aw Effects of air pollution

- Air pollution causes allergies, irritation of eyes, nose, throat
- Air pollution causes ~~and~~ diseases like asthma, bronchitis and respiratory disorder.
- The harmful gases released by air conditioners and refrigerators have reduced the thickness of the ozone layer of the atmosphere.
- Polluted air kills plants and trees by damaging their leaves.
- Burning of fossil fuels has increased the amount of carbon dioxide in the air.

Air pollution can be reduced by.

- Planting more and more trees can

help control air pollution.

- Automobiles should be checked regularly, so that they do not release harmful gases.
- We should use non-polluting fuel like CNG for cars and bus.
- We should use renewable forms of energy like solar energy by using solar cookers, solar cells, solar heaters.
- We should use eco-friendly spray cosmetics and perfumes.

Q5 We should prefer using CNG vehicle

Why

Ans We should prefer using CNG vehicle because CNG produces the fewest emissions of all other fuels and contain significantly less pollutant than conventional liquid fuel.

Q6 Automobiles need a regular check for the efficient working. Why?

Ans. Automobiles need a regular check for the efficient working because it helps in preventing costly repairs of the cooling system, transmission system, -

Q7 Factories and industries are not allowed to be established in residential areas. Why?

Ans. Factories and industries are not allowed to be established in residential areas because factories produced lot of pollution like noise, smoke and different types of gases based on the type of factory.

The heavy vehicles come to factories for both pick up and drop of goods.

Machines are so heavy that the walls of residential building will vibrates. Due to this vibration, any accident may happen.